Application Serial No.: 10/689,884 Attorney Docket No.: UTL 00248

Amendments to the Claims:

This listing of the claims will replace the listings of the claims in the present patent application:

Listing of Claims:

1. (Currently Amended) A mobile wireless communication device having a vibration alert, the mobile wireless communication device comprising:

a housing;

a speaker attached to the housing, the speaker <u>selected from a plurality</u> of different speakers, wherein each speaker is constructed to vibrate at a <u>different</u> mechanical vibration resonant frequency;

sweep circuitry configured to produce a sweeping signal <u>for the plurality</u> <u>of different speakers;</u>

drive circuitry responsive to the sweeping signal, the drive circuitry coupled to the sweep circuitry and to the speaker and configured to drive each of the plurality of different speakers the speaker at a sweeping frequency that causes each of the speakers to cause the speaker to vibrate; and

control circuitry selectively activating the sweep circuitry.

- **2. (Original)** The mobile wireless communication device of claim 1, wherein the mechanical vibration resonant frequency is in the frequency range of about 130 Hz to about 180 Hz.
- **3. (Original)** The mobile wireless communication device of claim 1, wherein the drive signal is in the frequency range of about 100 Hz to about 250 Hz.

4. (Original) The mobile wireless communication device of claim 1, wherein the sweep circuitry drives the speaker by sweeping back and forth across the frequency range of the drive signal at a rate of about 50 Hz.

- **5. (Original)** The mobile wireless communication device of claim 4, wherein the sweep circuitry sweeps back and forth across the range of the drive signal in a substantially sinusoidal pattern.
- **6. (Original)** The mobile wireless communication device of claim 4, wherein the sweep circuitry sweeps back and forth across the range of the drive signal in a discrete pattern.
- 7. (Currently Amended) A vibrator for a wireless phone, comprising: a speaker selected from a plurality of different speakers, wherein each speaker is constructed to resonate at a different mechanical vibration resonant frequency.

a driver coupled to the speaker and constructed to generate a drive signal in a predetermined frequency range for the plurality of different speakers, wherein the mechanical vibration resonant frequency for each of the speaker is within the predetermined frequency range and the drive signal sweeps back and forth across the predetermined frequency range at a sweep frequency; and

control circuitry selectively activating the driver thereby causing <u>each</u> the speaker to vibrate in the <u>speaker's</u> excitation frequency range <u>for the plurality of different speakers</u>.

8. (**Original**) The mobile wireless communication device of claim 7, wherein the speaker vibrates at the speaker's mechanical vibration resonant frequency.

- **9. (Original)** The mobile wireless communication device of claim 8, wherein the mechanical vibration resonant frequency is in the frequency range of about 130 Hz to about 180 Hz.
- **10**. **(Original)** The mobile wireless communication device of claim 7, wherein the drive signal is in the frequency range of about 100 Hz to about 250 Hz.
- **11. (Original)** The mobile wireless communication device of claim 7, wherein the sweep circuitry drives the speaker by sweeping back and forth across the frequency range of the drive signal at a rate of about 50 Hz.
- **12. (Original)** The mobile wireless communication device of claim 7, wherein the sweep circuitry sweeps back and forth across the range of the drive signal in a substantially sinusoidal pattern.
- **13. (Currently Amended)** The mobile wireless communication device of claim [[6]] <u>7</u>, wherein the sweep circuitry sweeps back and forth across the range of the drive signal in a discrete pattern.
- **14. (Currently Amended)** A method of generating a vibration alert on a mobile wireless communication device, comprising the steps of:

determining a range of mechanical vibration resonant frequencies for a plurality of <u>different</u> speakers;

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determining a sweep range and <u>a</u> sweep frequency for the range of mechanical vibration resonant frequencies <u>for the plurality of different</u> speakers;

receiving and detecting a call signal;

determining if a vibration mode of the mobile wireless communication device is active;

activating a driver to drive the <u>each</u> speaker with a drive signal; sweeping the drive signal across the sweep range and at the sweep frequency thereby causing the <u>each</u> speaker to vibrate in the speaker's excitation frequency range;

determining if the phone has been answered or the call has timed out; and

deactivating the driver.

- **15. (Original)** The method of claim 14, wherein the step of sweeping the drive signal causes the speaker to vibrate at the speaker's mechanical vibration resonant frequency.
- **16. (Original)** The method of claim 14, wherein the mechanical vibration resonant frequency range is from about 130 Hz to about 180 Hz.
- **17. (Original)** The method of claim 14, wherein the sweep range is from about 100 Hz to about 250 Hz.
- **18.** (**Original**) The method of claim 14, wherein the sweep frequency is about 50 Hz.
- 19. (Original) The method of claim 14, further including the step of:

sweeping the drive signal across the sweep range in a substantially sinusoidal pattern.

- **20. (Original)** The method of claim 14, further including the step of: sweeping the drive signal across the sweep range in a discrete pattern.
- 21. (Currently Amended) A method of receiving a vibration alert from a mobile wireless communicate device, wherein the mobile wireless communications device includes a speaker selected from a group of different speakers, wherein the plurality of different speakers have having a predetermined range of mechanical vibration resonant frequencies, the mobile wireless communications device further including a driver having a predetermined sweep range and a predetermined sweep frequency, the method comprising the steps of:

receiving and detecting a call signal;

generating a drive signal in response to the call signal to drive <u>each of</u> the <u>different speakers</u> speaker, wherein the drive signal sweeps across the predetermined range of vibration frequencies at the sweep frequency thereby causing <u>each of the different speakers</u> the speaker to vibrate; and alerting the user with the vibrations of the speaker.

- **22**. **(Original)** The method of claim 21, wherein the mechanical vibration resonant frequencies are in the frequency range of about 130 Hz to about 180 Hz.
- **23. (Original)** The method of claim 21, wherein the sweep range is about 100 Hz to about 250 Hz.

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24. (Original) The method of claim 21, where the sweep frequency is about 50 Hz.

- **25. (Original)** The method of claim 21, further including the step of: sweeping the drive signal across the sweep range in a substantially sinusoidal pattern.
- **26. (Original)** The method of claim 21, further including the step of: sweeping the drive signal across the sweep range in a discrete pattern.
- 27. (Canceled)